Michigan Homeland Security GIS Advisory Committee – GIS Readiness Assessment – 2004

The Michigan Homeland Security Advisory Council has established a sub-committee, the Michigan Homeland Security GIS Advisory Committee, to formulate recommendations on the development and use of geospatial technology and information statewide in support of the state and local homeland security program. The sub-committee is composed of individuals representing the diversity of the state (see attached list of committee members).

As stated in the March 25, 2004 letter from John Ort, State Police Deputy Director of Homeland Security, to all committee members, a major emphasis of the committee will be to develop an overall strategy for coordination between state and local jurisdictions regarding geospatial issues. The results of this assessment will assist in the following key initiatives of the sub-committee:

- Identify the requirements to synchronize the efforts of local GIS agencies with local Emergency Operations Centers.
- Develop a network of GIS professionals to be called on in the event of an emergency.
- Develop standards and priorities to establish a core set of spatial data consistent across the state.
- Establish criteria to create consistent GIS availability statewide.
- Identify state/local interaction requirements regarding geospatial data and technology.
- Identify funding opportunities and needs

You have been identified as a key stakeholder in the GIS technology field or in emergency operations. Your participation is very important and will be beneficial in establishing the recommendations that are sent to the Homeland Security Advisory Council.

Originally developed by the National League of Cities, the National Association of Counties, the International City/County Management Association and Public Technology, Inc., this assessment survey has been further augmented by the Michigan Homeland Security GIS Advisory Committee as part of the state's homeland security program.

Section I - Contact Information for the person completing the survey.

Please make all necessary corrections or additions to the information provided.

Current Address Information: **Corrected Address Information:**

«Agency»   _____
Attn: «FName» «LName»   _____
«Title», «Department»   _____
«Street»   _____
«City», «State» «ZipCode»
_____

Additional Information (please complete this section):

Preferred suffix: None   Sr.   Jr.   III   Esq.   PhD.   Other (please describe: _____)

Title: _____

Organization name: _____

Department or unit: _____

Telephone number: (___) ___-____ ext. _____ FAX number (___) ___-____

E-mail: _____@_____

Organization Web Page URL: _____

<u>Other Contact Information:</u>

Name of Planning Director (or equivalent):_____
Telephone number: (___) ___-____ ext. _____ E-mail:_____@_____

Name of 911 Director (or equivalent):_____
Telephone number: (___) ___-____ ext. _____ E-mail:_____@_____

Name of Public Works Director (or equivalent):_____
Telephone number: (___) ___-____ ext. _____ E-mail:_____@_____

Name of County Engineer (or equivalent):_____
Telephone number: (___) ___-____ ext. _____ E-mail:_____@_____

Name of County Equalization Director (or equivalent):_____
Telephone number: (___) ___-____ ext. _____ E-mail:_____@_____

Name of Emergency Management Director (or equivalent): _____
Telephone number: (___) ___-____ ext. _____ E-mail:_____@_____

Section II - Geographic Information Computer Systems (GIS) Utilization

1. Does your jurisdiction currently use GIS?   __ Yes __ No

2. If "yes," does your organization use one or more of the seven FGDC defined data layers (aerial imagery/orthoimagery, transportation, cadastral records and maps, elevation and contour information, **government** boundaries, hydrography, geodetic control)?
                __Yes   __ No

If you answered "no," continue to page 4.
If you answered "yes," go to page 5.

3   If you answered "no," please check all of the following statements that describe your organization. *(Check all applicable.)*

     __ 1. We once used GIS systems but found it was not useful or cost effective.
     __ 2. We once used GIS systems, found them useful, but did not have sufficient funding to continue operations.
     __ 3. We are interested in GIS systems, but we do not have the funding to implement
     __ 4. We are interested in GIS systems, but we do not have the technical expertise to implement
     __ 5. We are not interested in GIS systems at this time.
     Comments: _____
     _____

4.   Please check the type of categories utilized by your jurisdiction in the form of paper maps, aerial photographs, paper records, etc. *(Check all applicable.)*
     __ 1. Aerial imagery
     __ 2. Street networks (centerlines or edge of pavement)
     __ 3. Cadastral records and maps
     __ 4. Elevation and contour information
     __ 5. Land use
     __ 6. Flood Insurance Rate Maps
     __ 7. Lakes and Rivers
     __ 8. Geodetic control
     __ 9. Other (please describe: _____)
     __ 10. Other (please describe: _____)
     __ 11. Other (please describe: _____)
     Comments: _____
     _____

Thank you for completing this important assessment for Michigan

Please mail this page and the preceding pages to:

Michelle Beckwith
Michigan Center for Geographic Information
c/o Michigan Homeland Security GIS Advisory Committee
111 S Capitol Ave, G.W. Romney Bldg., 10th Floor
Lansing, MI 48913

The remainder of this survey is to be completed only by those respondents that indicated they use GIS.

<u>GIS Staffing</u>

5. How many full-time equivalent's (FTE's) are in your organization dedicated to GIS operations? _____

<u>Emergency Management</u>

6. How many GIS FTE's are currently at the disposal of emergency managers (including those through both formal and informal agreements)? _____

7. What type of **geospatial** assistance would be most beneficial to your emergency management organization? *(Check all applicable.)*

    __ Access to data
    __ GIS training for responder representatives
    __ Subsidy for hiring or contracting GIS support
    __ Facilitating volunteer GIS support in time of need
    __ GIS Software / Hardware
    __ Other (Please describe: _____)
    __ Other (Please describe: _____)
    __ Other (Please describe: _____)

Section III - GIS Functions, Applications, Systems, and Software

1. GIS functions are: *(Check only one.)*
    __ Centrally maintained   __ Maintained by multiple agencies   __ Maintained centrally and by multiple agencies

2. Which agencies perform GIS functions? *(Check all applicable.)*

    __ Planning
    __ Public works
    __ Drain Commission
    __ Public Utilities
    __ Environmental
    __ Health
    __ Fire Dept
    __ Police Dept.
    __ Information technology
    __ Human services
    __ Emergency management
    __ Transportation
    __ Education (K-12)

(List continued on next page)

__ Register of Deeds
__ Assessment / Equalization
__ Other (Please identify)_____
__ Other (Please identify)_____
__ Other (Please identify)_____

3. Which of the following applications using GIS data and technologies have been implemented by your jurisdiction? *(Check all applicable.)*

   __ Crime tracking (e.g., Comstat)
   __ Disease control
   __ Environmental
   __ Property record management and taxation
   __ Emergency preparedness and response
   __ Hazardous Materials Management
   __ Vehicle and field force routing
   __ Computer Aided Dispatch (CAD)
   __ E911
   __ Permitting
   __ Inspections
   __ Capital planning, design, and construction
   __ Infrastructure and facilities management
   __ Remote sensing from satellite imagery
   __ Weather forecasting
   __ Aerial photography
   __ Softcopy photogrametry
   __ GPS
   __ Hydrologic & Hydraulic Modeling and Analysis
   __ Other (Please describe: _____)
   __ Other (Please describe: _____)
   __ Other (Please describe: _____)

4. Does your jurisdiction currently provide Internet Mapping access to its data? __ Yes   __No

   If "no," is your organization planning to provide such access? __ Yes   __No

5. If your organization is planning to provide such access, is the time frame?
   __ Less than 1 year   __ More than 1 year.

6. Will the access be Internal?
   __Yes   __No

7. Will the access be External?
   __Yes   __No

8. If federal funding were available for homeland security needs in general, would your jurisdiction utilize a portion of this funding loans to improve its GIS system?
   __Yes   __ No

9. If "yes," how important would GIS improvements be?
   __ Major priority   __ Minor priority

10. If "yes," please indicate how your jurisdiction would improve its GIS system. *(Check all applicable.)*
    __ Increase accuracy
    __ Implement applications
    __ Design a system architecture for enterpris e GIS
    __ Build additional layers
    __ Improve maintenance (data updates)
    __ Create interjurisdictional GIS coverages or regional coverages
    __ Hire staff
    __ Hire consultants
    __ Train staff
    __ Acquire hardware, software, or telecommunication systems
    __ Other (Please describe: _____)
    __ Other (Please describe: _____)

11. Is your jurisdiction collaborating with other adjoining jurisdictions on building GIS data and/or applications?
    __ Yes   __ No

12. If "yes," please identify the type of collaboration: *(Please check all applicable boxes below.)*

Type of Effort With Whom	Policy/Procedural	Data	Applications	Standards	Hardware	Financial	Other _____
Federal							
State							
Regional							
County							
Local							
Other _____							
Other _____							

13. Please identify which of the following your organization uses. *(Check all applicable.)*

GIS Operating Systems: __UNIX   __Linux   __Windows   __NTWindows   __XPWindows (Yr.) _____

GIS Software:

   __ Bentley
   __ ESRI
   __ AutoDesk
   __ Caliper
   __ GenaMap
   __ ERDAS
   __ Intergraph
   __ MapInfo
   __ MapObjects
   __ Smallworld
   __ IDRISI
   __ C-Map
   __ Map Image Viewer
   __ MS Map Point
   __ Other (Please identify)_____
   __ Other (Please identify)_____
   __ Other (Please identify)_____
   __ Other (Please identify)_____

Computer Aided Drafting Software:

   __ AutoCAD
   __ TurboCAD
   __ ArcCAD
   __ Microstation
   __ Other (list)_____
   __ Other (list)_____
   __ Other (list)_____
   __ Other (list)_____

Database Management Software:

   __ RDBMS Software:
   __ Oracle
   __ DB2
   __ Informix

(List continued on next page)

__ SQL
__ Server
__ MS
__ Access
__ dBase
__ Other (list)_____
__ Other (list)_____

14. Does your organization collect data with a GPS receiver? __ Yes   __ No

15. How many GPS receivers are available for your organizations use? _____   Do you use these regularly?   __ Yes   __ No

16. If yes, what grade receiver is in use?   __ Survey (< centimeter)   __ Mapping (< 1 meter)   __ Recreational (> 1 meter)

17. What map coordinate system does your organization use? *(Check all applicable.)*
__ Localized
__ UTM
__ Geographic (Latitude/Longitude)
__ State plane
__ Michigan Georef (Oblique Mercator)
__ Other (list)_____
__ Other (list)_____
__ Other (list)_____

18. Has your organization developed or is it developing metadata for the data layers?   __ Yes   __ No

Section IV - Data Distribution

1. Does your organization maintain a consolidated list of available data?   __Yes   __No

2. If yes, how is the list available?
__ Hardcopy   __ Internet   __ Intranet   __ NSDI   __ Clearinghouse   __ Other(list)_____

3. If the list is available on the Internet, what is the website URL for the list of available data? _____

4. Does your organization distribute data?   __ Yes   __ No

If no, please skip to section 5 on page 11.

5. Does your organization typically copyright its data?
    __ Yes   __ No

6. Does your organization typically license its data?
    __ Yes   __ No

7. Would it be helpful to have your organization's data housed on a central server hosted by another entity?
    __ Yes   __ No

8. Do you have a local policy that governs your data distribution?
    __ Yes   __ No

If yes, please explain _____

9. If your organization charges for GIS data and maps, then is the revenue critical to funding the GIS maintenance and development work?
    __ Yes   __ No

10. Does your organization restrict redistribution of its data?
    __ Yes   __ No

Section V-a - General Information about Data

Please complete the attached table on the following pages to provide information on the development of data within your jurisdiction. You need only indicate with a yes, no or "?", whether a listed digital GIS layer exists for your jurisdiction, whether it is available to your jurisdiction Emergency Operations Center and whether you believe that it is (or will) be critical to the EOC in the event of an incident. The data layers listed are those identified by a cross-section of GIS data users in the state as potentially important for use during a homeland security incident. You will also have an opportunity to identify any other layers not listed that you believe are critical to your jurisdiction in the event of a homeland security emergency.

See Attached Table

Assessment Completed by:

Print Name: _____

Title: _____

Signature: _____

Date: _____

Please mail this page and the preceding pages to:

Michelle Beckwith
Michigan Center for Geographic Information
c/o Michigan Homeland Security GIS Advisory Committee
111 S Capitol Ave, G.W. Romney Bldg., 10th Floor
Lansing, MI 48913

Thank you for completing this important assessment for Michigan